

SEQUENCE LISTING

531 Rec'd PCT/PT 24 OCT 2001

<110> Zanetti, Maurizio

<120> Somatic Transgene Immunization and Related Methods

<130> P-ZA 5015

<140>

<141>

<150> US 09/300,959

<151> 1999-04-27

<150> PCT/US00/11372

<151> 2000-04-27

<160> 42

<170> PatentIn Ver. 2.1

<210> 1

<211> 27

<212> DNA

<213> Mus musculus

<400> 1

aaggcctact ctcatggatat ggactac

27

<210> 2

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: mutant heavy
chain complementarity determining region 3(CDR3)

<400> 2

aaggtaccct actctcatgg tatggactac

30

<210> 3

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: mutant heavy
chain complementarity determining region 3(CDR3)

<400> 3

gtaccaatg caaacccaaa tgcaaaccca aatgcaaacc cagtacc

48

<210> 4

<211> 4

<212> PRT

<213> Plasmodium falciparum

<400> 4

Asn Ala Asn Pro

1

<210> 5

<211> 422

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: genomic VDJ
region

<400> 5

gacgtgaagc tgggtggagtc tgggggaggc ttagtgaagc ttggagggtc cctgaaactc 60
tcctgtgcag cctctggatt cactttcagt aggtattaca tgtcttgggt tcgccagact 120
ccagagaaga ggctggagtt ggtcgcagcc attaatagta atggtggtag cacctactat 180
ccagacactg tgaagggccg attcaccatc tccagagaca atgccaaaaa caccctgtac 240
ctgcaaatga gcagtctgaa gtctgaggac acagccttgt attactgtgc aagaaaggta 300
ccctactctc atggtatgga ctactggggt caaggaacct cagtcaccgt ctcctcaggt 360
aagaatggcc tctccaggtc tttattttta acctttgtta tggagttttc tgagcattgc 420
ag 422

<210> 6

<211> 422

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: genomic VDJ
region

<400> 6

```

gacgtgaagc tgggtggagtc tgggggaggc ttagtgaagc ttggagggtc cctgaaactc 60
tcctgtgcag cctctggatt cactttcagt aggtattaca tgtcttgggt tcgccagact 120
ccagagaaga ggctggagtt ggtcgcagcc attaatagta atggtggtag cacctactat 180
ccagacactg tgaagggccg attcaccatc tccagagaca atgccaaaaa caccctgtac 240
ctgcaaatga gcagtctgaa gtctgaggac acagccttgt attactgtgc aagaaaggta 300
ccctactctc atggtatgga ctactggggt caaggaacct cagtcaccgt ctcctcaggt 360
aagaatggcc tctccaggtc tttattttta acctttgtta tggagttttc tgagcattgc 420
ag                                                                 422

```

```

<210> 7
<211> 419
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: genomic VDJ
      region

```

```

<400> 7
gacgtgaagc tgggtggagtc tgggggaggc ttagtgaagc ttggagggtc cctgaaactc 60
tcctgtgcag cctctggatt cactttcagt aggtattaca tgtcttgggt tcgccagact 120
ccagagaaga ggctggagtt ggtcgcagcc attaatagta atggtggtag cacctactat 180
ccagacactg tgaagggccg attcaccatc tccagagaca atgccaaaaa caccctgtac 240
ctgcaaatga gcagtctgaa gtctgaggac acagccttgt attactgtgc aagaaaggcc 300
tactctcatg gtatggacta ctgggggtcaa ggaacctcag tcaccgtctc ctcaggtaag 360
aatggcctct ccaggctctt atttttaacc tttgttatgg agttttctga gcattgcag 419

```

```

<210> 8
<211> 419
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: genomic VDJ
      region

```

```

<400> 8
gacgtgaagc tgggtggagtc tgggggaggc ttagtgaagc ttggagggtc cctgaaactc 60
tcctgtgcag cctctggatt cactttcagt aggtattaca tgtcttgggt tcgccagact 120
ccagagaaga ggctggagtt ggtcgtagcc attaatagta atggtggtag cacctactat 180
ccagacactg tgaagggccg attcaccatc tccagagaca atgccaaaaa caccctgtac 240
ctgcaaatga gcagtctgaa gtctgaggac acagccttgt attactgtgc aagaaaggcc 300
tactctcatg gtatggacta ctgggggtcaa ggaacctcag tcaccgtctc ctcaggtaag 360
aatggcctct ccaggctctt atttttaacc tttgttatgg agttttctga gcattgcag 419

```

<210> 9
 <211> 12
 <212> PRT
 <213> Plasmodium falciparum

<400> 9
 Asn Ala Asn Pro Asn Val Asp Pro Asn Ala Asn Pro
 1 5 10

<210> 10
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 complementarity determining region 2 (CDR2)

<400> 10
 aatgcaaacc caaatgtaga tccaatgcc aaccga 36

<210> 11
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 complementarity determining region 3(CDR3)

<400> 11
 aatgcaaacc caaatgcaaa cccaatgca aaccga 36

<210> 12
 <211> 62
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 complementarity determining region 3 (CDR3)

<400> 12
 aaggtagccg cttccaatga aaatatggag actatggaat caagtacact tgtaccctac 60
 tc 62

<210> 13
 <211> 14
 <212> PRT
 <213> Influenza virus

<400> 13
 Ala Ser Asn Glu Asn Met Glu Thr Met Glu Ser Ser Thr Leu
 1 5 10

<210> 14
 <211> 48
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 oligonucleotide

<400> 14
 gtacccgctt ccaatgaaaa tatggagact atggaatcaa gtacactt 48

<210> 15
 <211> 11
 <212> PRT
 <213> MUC-1 tumor antigen

<400> 15
 Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro
 1 5 10

<210> 16
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 16
 Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro
 1 5 10

<210> 17
<211> 12
<212> PRT
<213> MUC-1 tumor antigen

<400> 17
Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala Pro
1 5 10

<210> 18
<211> 24
<212> DNA
<213> Mus musculus

<400> 18
ttc gatgtcc ataccatgag agta 24

<210> 19
<211> 24
<212> DNA
<213> Mus musculus

<400> 19
ttcagcacct actatccaga cact 24

<210> 20
<211> 24
<212> DNA
<213> Homo sapiens

<400> 20
ttcctcttct gcgtgtagtg gttg 24

<210> 21
<211> 24
<212> DNA
<213> Homo sapiens

<400> 21
ttcataatgc caagacaaag ccgc 24

<210> 22

<211> 23
<212> DNA
<213> Mus musculus

<400> 22
ttattgagaa tagaggacat ctg 23

<210> 23
<211> 21
<212> DNA
<213> Mus musculus

<400> 23
atgctcagaa aactocataa c 21

<210> 24
<211> 23
<212> DNA
<213> Mus musculus

<400> 24
aacagtattc tttctttgca tgg 23

<210> 25
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 25
atgctcataa aactccataa c 21

<210> 26
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 26
aacagtattc tttctttgca gc 22

<210> 27
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 27
gagagtaggg tactgggttt 20

<210> 28
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 28
agcacctact atccagacac t 21

<210> 29
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 29
gtagtccata ccatgagagt a 21

<210> 30
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
oligonucleotide

<400> 30

tgggccgccc tagtcacc

18

<210> 31

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
oligonucleotide

<400> 31

cgtttggcct tagggttcag

20

<210> 32

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide

<400> 32

Asp	Glu	Asn	Gly	Asn	Tyr	Pro	Leu	Gln	Cys
1				5					10

<210> 33

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
oligonucleotide

<400> 33

caagaaaggt accctactct c

21

<210> 34
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 34
agtaatggcc atggtagcac c 21

<210> 35
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 35
gtaccaatg caaacccaaa tgcaaacc ca 42

<210> 36
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 36
gtactgggtt tgcatttggg tttgcattt gg 42

<210> 37
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 37
catggtaatg caaacccaaa tgtagatccc aatgccaacc ca

42

<210> 38
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
oligonucleotide

<400> 38
catgtggggtt ggcattggga tctacatttg ggtttgcatt ac

42

<210> 39
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide

<400> 39
Asn Ala Asn Pro Asn Ala Asn Pro Asn Ala Asn Pro
1 5 10

<210> 40
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide

<400> 40
Asn Val Asp Pro
1

<210> 41
<211> 9
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide

<400> 41

Ala Ser Asn Glu Asn Met Glu Thr Met
1 5

<210> 42

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
oligonucleotide

<400> 42

gtacaagtgt acttgattcc atagtctcca tattttcatt ggaagcgg

48